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A STUDY TO DETERMINE THE APPLICABILITY OF PRE-RECORDED AUDIO HEALTH MEDICAL INFORMATION TO THE AMEDD IN CONUS

WILLIAM BEAUMONT ARMY MEDICAL CENTER EL PASO, TEXAS

A GRADUATE RESEARCH PROJECT

SUBMITTED TO THE FACULTY OF

BAYLOR UNIVERSITY

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

MASTER OF HEALTH CARE ADMINISTRATION

BY

Captain Peter A. Basler, Jr., MSC

August 1984

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Major Smith was instrumental in giving the initial impetus to the research project idea and helped to define the problem statement. His assistance provided the foundation for the first draft of both questionnaires. Captain Hawkins' experience in research and numerous publications assisted in developing the final draft of my Graduate Research Project Proposal and in interpreting the data collected from the survey instruments. Captain Hawkins' knowledge and expertise of the hospital's TRS-80 computer system allowed him to guide me through the use of its basic statistical package. The TRS-80 statistical package performed all the computations used for the various statistical analysis. Without Captain Hawkins' guidance, I would have spent weeks computing data and would have surely performed many incorrectly.



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Mrs. Stephens has been a valuable aide in performing the word processing tasks to finalize this project and providing constructive criticism to ensure the paper was cohesive and comprehensible. Mrs. Stephens also provided daily motivation for completion of the project by giving me constant reminders of established suspense dates. It should also be known that Mrs. Stephens donated many hours on weekends to ensure this project was professionally typed and formatted. Her loyalty and generosity will never be forgotten.

Sierra Medical Center has an operational Tel-Med system that serves the communities of El Paso, Texas, and Juarez, Mexico. The administrators and in particular, Mrs. Freeman, were very supportive of my project. They often gave of their time to acquaint me with the systems' operation. Mrs. Freeman personally took me under her wing and aided by getting me in contact with Tel-Med, Inc. of Colton California. She also arranged to provide William Beaumont Army Medical Center, through me, 2500 Tel-Med brochures on a quarterly basis for distribution among our consumers. Her candid advice and personal friendship proved to be a most valuable asset.

Again, I thank members of the AMEDD family and staff at Sierra Medical Center for their support and donation of their time and talent.

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I. INTRODUCTION

Development of the Problem

Health has always been a humane concern, but the number of people taking an active role in matters relating to their own health, or that of their families, has been growing in recent years. Historically, there has been an interest in specific health problems, such as birth control, venereal disease, sanitation, and use of drugs. Today, the concerns have expanded to encompass all aspects of health, disease, and access to health care. Recent trends including the consumer movement, self care, wholistic care, cost containment (patient and facility), informed consent, malpractice claims, and the problems of chronic illness have contributed to this expanded interest. All of these social and political concerns have served to amplify the demand for health information. 1

The maintenance of health and prevention of disease lie, for the most part, beyond the control of current medical practice. Economic circumstances, health education, and general attitude have a greater impact on health status and mortality than do the number and kind of medical services used. The major killers in this country today are heart malfunctions, cancer, stroke, and accidents. The primary causative or precipitating factors for each of these are affected by life style, stress, diet, and poor health habits such as smoking or misuse of alcohol or drugs. Social factors also have a profound

effect, not only upon health, but upon access to health care. Thus, it is obvious that when we talk about health information, we are talking not only about disease, but about all these factors which may affect the physical and mental well-being of an individual.²

A 1977 editorial in <u>Science</u> stressed the responsibility each individual has for his own health, but pointed out that lack of knowledge creates a barrier to the assumption of this responsibility. The obligation to preserve one's own health implies a right to expect help with information. The present picture of consumer health information is limited and fragmented, at best. Consumers of Army medical services must continually enter our facilities to obtain health information, thereby increasing our waiting lines, at times misusing our providers, and inconveniencing themselves. Worse yet, due to health ignorance, patients often do not present themselves at our doors until the disorder has escalated in severity and is out of control or nearly so. Lack of health information appears to be a prevalent concern of our consumers as shown by their misuse of our emergency and outpatient treatment facilities.

'Consumers must play a more active role in taking care of themselves. In order to do so, medical information which leads to education must be readily available.' Education implies an effect on the individual; something is learned; and as a result, an action is taken, a behavior changed, or a decision

made. Information dissemination, on the other hand, may be considered a less aggressive role. The individual is directed to or provided with information without interpretation, without opinion, or counseling. Information dissemination facilitates self-education; learning is left to the individual. 'The object (of medical information) is to save lives by educating the public to recognize disease and anticipate its progress, thereby averting the danger that results from neglect. The natural intellectual growth is from ignorance to knowledge. Little by little, information is acquired: it is only thus that education results...'

'You can do more for your health than your doctor can. As an enlightened medical consumer, you can save money and time, and provide for the best possible medical care for yourself and your family... You can learn to recognize when it's important to get to a doctor or hospital. You can learn to cut the high costs of medicine.' Many visits to providers occur for health information. Demand the worried well has placed upon limited health care resources has been significant. This greater demand contributes to longer waiting lines, less time with the doctor (provider), increased charges (or other costs to the patient) and higher medical-insurance premiums (increased costs to the government). In our national quest for a symptom-free existence, as many as 70 percent (70%) of the visits have been termed unnecessary. The competent physician's response to these visits is either to reassure the patient or to advise measures which are available without prescription.'

'In recent years, the telephone has been used to facilitate access to health information for an information hungry public.' Mumerous medical facilities, private and governmental, have utilized telephonic, layman-oriented, taped messages that can be retrieved by consumers to gather health information. Health-Line and Tel-Med are two examples of civilian systems with Tel-Med being the predominately utilized system (Appendices A & B).

Tel-Med, a nonprofit organization, was created by the San Bernardino County Medical Society in Californi., and began operation in April 1972. It started as a local experiment to improve access to accurate medical information, and to decrease the overwhelming demand from the worried well. It has now grown to the point that it delivers 1,000,000 health messages each month in over 200 cities in the United States. In El Paso, Texas, it is also utilized by residents of Juarez, Mexico. Call volume varies in different systems depending upon community size, hours of operation, and promotion.

Consumers desiring access to information dial the local Tel-Med telephone number and request the tape by subject title or number. The operator selects the proper cartridge from a bank of tapes and plugs it into a playback device. The tape is in a continuous loop cartridge that automatically shuts off and is ready for play upon the next request.

The tape library now addresses more than 300 subjects in English, with 200 of those also available in Spanish, and 11 other foreign languages. The length of the recordings varies from three to ten minutes. Members of the San Bernardino County Medical Society have written most of the scripts, but many have also come from health care providers in other cities. LTC Collin Smith, from Sheppard AFB, TX, which utilizes the Tel-Med system, says they have expanded their library to include messages on CHAMPUS, hours of operation, eligibility of care, and intend to add other messages on items unique to the military. The scripts are edited and revised by Tel-Med staff into simple language for comprehension at the eighth grade education level. A panel of physicians reviews the revisions for accuracy and quality of presentation. The final script is professionally narrated and recorded (Appendix C). 11

'Because Tel-Med programs meet these needs (preventive and health promotion) by emphasizing maintenance of health and preventive or early detection of disease, public response throughout the nation is consistently enthusiastic and supportive. As a bonus, the sponsoring agencies have reaped a harvest of good will and favorable publicity... Tel-Med guides them (consumer) to proper utilization of available facilities. The messages effectively supplement physician and staff counseling for patients and their families. An easily accessible link of communication between providers and consumers has resulted. Because callers remain anonymous, they can request vital information on sensitive subjects such as venereal diseases or birth control

without fear of identification. Accurate information on drug use and abuse can be presented. A frightened, insecure listener can seek assistance with confidence and without embarrassment.

Tel-Med has proven to be very inexpensive per phone call. A 1979 nation-wide study found the cost to be 23 cents per call. There is probably no less expensive means to provide specific requested health information. 14

The basic objectives for the pre-recorded audio health/medical information system, Tel-Med, are as follows:

- 1. To increase accessibility to health information by providing standardized, medically certified, easily understood information at no cost to the user; anonymity and confidentiality were to be maintained, parental permission not required.
- 2. To combat rising health care costs by reducing unnecessary visits to physicians for standardized medical information.
- 3. To facilitate access to health services for all citizens where there is a definite medical need (includes reduced waiting times).
 - 4. To help people recognize early signs of illness.
- 5. To help people find appropriate community resources to deal with their medical problems. 14

AMEDD treatment facilities and their consumers may benefit in a number of areas just as our civilian counterparts, through:

- 1. Increased public relations.
- 2. Decreased waiting lines.
- 3. Accurate and better information for lifestyle decisions.
- Providers can use the system to augment and reenforce medical information given to the patient.
- 5. Help consumers recognize early signs of illness.
- 6. Help consumers find appropriate community resources.

The research question is to determine if a pre-recorded audio health information system, which has been successful in the civilian arena, is applicable to the AMEDD in the Continental United States.

Review of the Literature

Studies in the late 60's and early 70's convinced the American Medical Association, the California Medical Association, and the United States

Department of Health, Education and Welfare to provide funding for the development of an audio health/medical information system. The system and organization, Tel-Med, was created in 1972 by the San Bernardino County Medical Society as a nonprofit public assistance entity.

Two research efforts published in March and October 1980 provided additional data on use and effectiveness of a telephone health information system, and the need for consumer health information. These two studies and their survey questions serve as the foundation for this research project.

The use and effectiveness study was conducted in Winston Salem by Robert A. Diseker, DrPh; Robert Michielutte, PhD; and Virginia Morrison, MED. The study was performed by conducting random telephonic interviews three years after a telephonic information system (Tel-Med) was implemented. The intent was to determine and gather user characteristics, user motivation, action taken by consumers, knowledge and information gained, and suggested system improvements.

Results of the Winston Salem study indicated (user characteristics) a higher percentage of middle-aged adults and a larger proportion of females had prior knowledge of the system. The results for education and income indicated socio-economic status was positively related to prior knowledge of the system's existence. However, once a consumer knew of the system, usage could be predicted upon sex alone. Women were more likely than men to say they used the system. User motivation questions revealed persons over the age of 50 were more likely to have used the system for their own health problems than were adults age 21-49.

Action taken or behavior modification questions showed 25 percent of the system users had been encouraged to seek nedical or dental care initially or sooner than they otherwise would have. Thirty percent reported the system made it unnecessary for them to see a doctor and 42 percent followed a suggestion made on the tape(s). Knowledge gained was demonstrated by the behavior modification that occurred.

Suggestions for improvements included expansion of the number of subject tapes, and to increase advertising/promotion of the service. Less than one percent found the service embarrassing or offensive. Most users (82.7 percent) gave the service an overall "very useful" rating. 15

The study of need for consumer health information conducted by Kathleen A. Moeller and Kathleen E. Deeney, both librarians from Overlook Hospital, Summit, New Jersey, was performed in October 1980. The primary intent was to gather information relevant to the development of a new library. This study, through a written survey, determined information needs, information sources, and the scope of information required by medical consumers.

The conclusions as revealed by the authors showed 72 percent of the consumers needed health information within the past year, with four out of ten unable to find it, indicating a large information gap. Primary sources of information were: physician with 55.5 percent of the responses. The public library capturing 18 percent of the choices and the remainder were spread across parents, friends, newspapers, Tel-Med, magazines, televisions, and other sources. The scope of information requirements, or topics for which they would like access included staying well, illness, sexual, allergies, self-help, stress, dental health, and first aid. Each of the topics included numerous subsets. Continuously stressed was the need for subjects to be addressed in lay terminology. 16

Other studies and numerous articles address the consumers' (patients) need for accurate laymen-oriented health information. This information is not intended to replace the provider but rather to augment their services and aide the consumer in making health and life style decisions.

Research Methodology

Upon completion of an exhaustive literature review concerning the need for and use of medical information by inpatients and outpatients, the research focuses on existing civilian systems and search for military usage. This research includes interviews, both telephonic and in person, and use of survey

instruments. Simultaneously, the surveys collect data to determine the need of health/medical information as felt by Army medical treatment facility consumers and to determine if there exists a difference in usage based on demographic variables: age, education, sex, race, and military status. In addition, data collection is designed to determine the need for health/medical information as felt by providers of Army medical care and to determine if a difference exists between providers who would support a pre-recorded audio health system.

Two different survey instruments obtained responses from providers of care and consumers of health care in AMEDD treatment facilities. The instruments development came from a number of sources. Initially, questions were obtained from the literature references previously discussed under 'Literature Review.' Questions were added to and deleted from in order to answer basic objectives. The instruments were first discussed with Major Michael Smith, the Administrative Officer for the Department of Clinical Investigation at WBAMC, and LTC Arthur Badget, Associate Professor, US Army-Baylor. Both greatly assisted in formulating the first draft. The second and final draft of the two instruments (Appendix D and E) came about with the aid of Captain Michael Hawkins, PhD, a clinical research psychologist. He assisted in testing the instruments for validity and reliability.

Both surveys were sent to sixteen AMEDD medical treatment facilities (MTFs):

MEDACS

MEDCENS

DDEAMC	Fort Benning	Fort Knox
FAMC	Fort Bragg	Fort Lee
MAMC	Fort Campbell	Fort Meade
WBAMC	Fort Carson	Fort Riley
WRAMC	Fort Hood	Fort Sill
		Fort Stewart

These institutions were chosen being they all have Administrative Residents who will assist in coordinating the survey effort thereby increasing the probability of returned forms. In addition, all sized MTFs are represented as is a geographical cross-section. Twenty copies of the consumer survey and ten copies of the provider survey were sent to each institution for a total of 320 and 160 respectively.

Methods of evaluating the surveys include use of frequency distribution, chi square testing correlation matrix, analysis of variance, and regression analysis. Level of confidence for use with chi square and analysis of variance is 95 percent.

Lastly, literature research, telephonic interviews, and site visits are employed to collect cost data to determine the cost of purchasing a commercial system versus the cost of producing an 'in-house' system.

Criteria to determine the applicability of a pre-recorded audio health/
medical information system to the AMEDD in CONUS is based on the responses of
consumer proposed usage and providers' support through referral. Each must
produce a frequency distribution with at least 75 percent affirmative
responses.

FOOTNOTES

- Dottie Eakin, "Consumer Health Information," <u>Bulletin of the Medical Library Association</u>, 68(2) (April 1980): 220.
 - ²Ibid.
 - ³Ibid.
- Donald M. Vickery, <u>Take Care of Yourself</u>. (Massachusetts: Addison-Wesley Publishing Company, 1976). p6.
- ⁵Philip Skrainka, M.D., <u>Medical Information In Sickness and Health</u>, (New York: Coward-McCann Inc. 1980) p 10.
 - ⁶Ibid., p3.
- ⁷Robert A. Diseker, Dr., P.H., Robert Michielutte, PhD, and Virginia Morrison, Med, "Use and Reported Effectiveness of Tel-Med: A Telephone Health Information System," <u>American Journal of Public Health</u>, 70(3) (March 1980): p229.
- ⁸Donald M. Vickery, <u>Take Care of Yourself</u>. (Massachusetts: Addison-Wesley Publishing Company, 1976). pl.
- ⁹Robert A. Diseker, Dr., P.H., Robert Michielutte, PhD, and Virginia Morrison, Med, "Use and Reported Effectiveness of Tel-Med: A Telephone Health Information System," <u>American Journal of Public Health</u>, 70(3) (March 1980): p229.
- Interview with Mark Provost Manager of Operations Teletronix, Colton, California, 27 December 1983.
 - ¹¹Ibid.
- 12 Benson W. Harper, M.D., "Tel-Med A Success Story," Western Journal of Medicine, 131(2) (August 1979): 163.
 - 13_{Ibid}.

14 Robert A. Diseker, Dr., P.H., Robert Michielutte, PhD, and Virginia Morrison, Med, "Use and Reported Effectiveness of Tel-Med: A Telephone Health Information System," <u>American Journal of Public Health</u>, 70(3) (March 1980): p230.

15_{Ibid}.

16 Deeney, Kathleen E. and Moeller, Kathleen A. "Documenting the Need for Consumer Health Information: Results of a Community Survey." <u>Bulletin of the Medical Library Association</u> (70)2 (April 1982): 236-239.

II. DISCUSSION

Present Usage

Search for a pre-recorded audio health information system in the AMEDD began with interviews among senior AMEDD officers (grades 05 and 06) at WBAMC. The interviews did not produce the discovery of any operational systems. A telephonic interview with the manager of operations Teletronix, a division of Tel-Med, Inc., produced the same results. However, an operational system was discovered in use by Sheppard Air Force Base, Texas.

Provider surveys sent to Blanchfield Army Community Hospital, Fort Campbell, Kentucky, reveal the use of Tel-med at the facility. Telephonic inquiries have produced historical and organizational data. The system has been operational since May 1980. Average usage is 360 calls per month with slight increases during promotional periods.

The system is operational 24 hours per day and may be utilized by civilians and military in either community. It is operated out of the communication section by the hospital telephone operators. Staffing of telephone operators for the hospital is at the same level prior to system implementation. The tape library consists of 305 messages (Appendix F). The Community Health Nurse

(CHN), Department of Preventative Medicine, has operational control of the system. The CHN is responsible for keeping the system current and for promotion among the civilian and military community.

The systems' goals are to assist the community in remaining healthy, to recognize early signs of illness, to adjust to an illness of surgery, to prevent some health problems, and to promote public relations in and among the civilian and military communities. The CHN feels all goals have been realized, but not to the extent possible. Call volume must be increased to significantly realize the stated goals. Usage is directly related to promotion and promotion is a time-consuming effort. In order to reap the full benefits of the system, an intense promotion/advertising comparing must be initiated.²

In contrast to the Blanchfield Army Community Hospital, Sierra Medical Center, El Paso, Texas, utilizes the Tel-Med system to a greater degree. Their system receives approximately 1100 calls per month and is operated by two full-time employees per eight-hour shift. The key to their success lies in promotion. Their brochures are readily available throughout El Paso at 7-Eleven Stores. In addition, two billboards and frequent ads in local papers provide the telephone access number. Currently, brochures can also be found in clinics throughout William Beaumont Army Medical Center for use by the military community.

In summation, usage in the AMEDD facility is low; however, it is meeting established goals although minimally. The system can be fully successful if properly promoted among consumers and providers.

Consumer Survey

A set of twenty consumer surveys sent to sixteen AMEDD treatment facilities netted 248 usable surveys for a 77.5 percent return rate. Demographic analysis include use of frequency distribution for sex, race, and military status plus descriptive statistics for education level and age. The demographic data was completed by 243 respondents. The composition (profile) of the respondents are:

TABLE 1
CONSUMER PROFILE

Sex			Military Status		·	
Males	109	44.8%	Active Duty	99	39.92%	
Females	134	55.2%	Dependent, AD	85	34.27%	
			Retired, AD	28	11.29%	
Race			Dependent, Ret	33	13.31%	
			Other	3	1.21%	
Caucasian	159	65.4%				
Negro	66	27.2%				
Other	18	7.4%				

The mean level of education is 13.23 years with a range of 7 to 23 years. Average age is 33.3 years and a range of 12 to 75 years.

When asked if within the past year have they (consumers) had a need for information on health or disease, 159 or 64.11 percent, responded yes and 89, or 35.81 percent, responded no. The next question asked if they had difficulty obtaining information; 43 or 17.34 percent said yes; and 205, or 82.66 percent, said no. Comparing the number of respondents (159) who said they needed information against the question of difficulty in obtaining information, the result shows a slightly higher percentage, 27.04 percent, responding yes. Therefore, 64 percent of the respondents have needed health/disease related information within the last year, and 27 percent of the group have had difficulty obtaining it.

Consumers were asked to rank the most frequent sources of health information for them. They were given eight sources and asked to rank them on a scale from one to eight, with one being the most frequent source and eight the most seldom. Respondents number 248; however, only 34 complete rankings are given. Figure #1 shows the sources chosen as first (248 respondents) and figure #2 (139 respondents), the second choice.

INFORMATION SOURCE

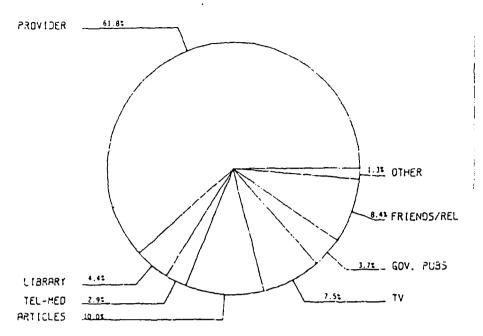


Figure 1. Source of Medical Information (First Choice)

INFORMATION SOURCE

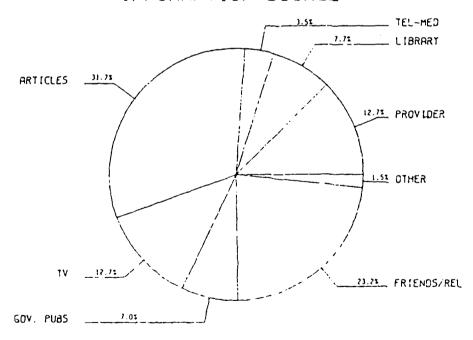


Figure 2. Source of Medical Information (Second Choice)

As might be expected, the provider (Physician, Physician Assistant, Nurse, or Allied Health Scientist) is the first choice for the majority of patients receiving 61.8 percent of the responses. Articles from various journals, magazines, and newspapers with 25 percent are the second most popular source. These results mirror results from the literature review (Moeller and Deeney) in position/ranking. However, this study shows a higher percentile of responses for providers. This may be due to access and availability to the AMEDO health system or to this research question's referral to providers vs physician as in the literature. However, Moeller and Deeney did not give a choice for any other category of provider; therefore, access and availability of AMEDO consumers appear to be the cause for the slight variance.

Question #4 of the consumer survey asks if they would use an audoio (taped message) medical information system if it were available. A frequency distribution (Table 2) shows a majority of yes respondents. If all respondents act as they indicate, then the AMEDD consumer would use the system slightly more (81 percent vs 70 percent) than the general population. It must be remembered, in order to use the system, adequate advertising/promotion must reach the consumer. Low usage levels are universally attributed to poor promotion.

TABLE 2
CONSUMER PROPOSED USAGE

Choice	# of Respondents	# of Responses
Yes	201	81.05%
No	46	18.54%
Possible	e l	.40%

Comparison to determine if indicated future use differs among groups based on demographic data, sex, race, age, education level, and military status provides data that reinforces the Diseker and Michielutte study. Analysis of variance (ANOVA) use for sex, race, and military status provides statistical significance of correlation for sex only. The results with an F-ratio of 12.6007 and probability value of .0008 indicate that the null hypothesis (Ho), there is no difference between desired use and sex of the respondent, is false. Therefore, there is a statistical difference. Upon evaluating the mean score, 1.29 for males and 1.11 for females (given that yes is scored 1 and no is scored 2), it is obvious females are more likely to use the system. The null hypothesis, based on proposed usage and race, Caucasian, Negro, or other was not rejected at the 95 percent level. Therefore, statistically there is no difference based upon race. Military status also subject to ANOVA resulted in an F-ratio of 2.23 and a probability value of .0655. Although this is very close to rejecting the null hypothesis, it did not; therefore, military status is not an indicator of usage. Should the level of significance have been chosen to be 90 percent, the null hypothesis would have been rejected.

Multiple regression and correlation matrix tests both resulted in disproving any statistical relationship between projected usage, and age or education level. Multiple regression provides a slope in such a small quantity (1/100ths) as to make forecasting based upon age and education levels useless.

The Diseker and Michielutte study on use and effectiveness also showed that sex was a factor in usage with females utilizing the system more than males. Although knowledge of the system was a factor of age, education level, and monetary status (direct relationship) usage after knowledge did not show a direct or indirect relationship.

Questions 5 through 7 address: trust of the system, proposed behavior modifications based upon advice given and increased peace of mind after listening to a tape. The patterns of response follow the results of proposed usage with the exception of peace of mind. Negative responses amounted to 21 percent for trust and 20 percent for behavior modification which indicate the intended usage response of 81 percent was valid. The question concerning peace of mind shows a 31 percent negative response. Most of these responses contained a comment indicating they still would want the provider to reassure them.

Lastly, question #8 of the consumer survey asks if the service would be used: for the entire family, only for the respondent, only for other members of the family, or not at all. A frequency distribution produces 69.35 percent for the entire family, 10.89 percent for the respondent only, no response for other members, and 19.76 percent for not at all. The responses validate question #4 regarding projected usage. Negative responses total 19.76 percent and affirmative responses comprise 80.24 percent which mirror the negative and affirmative responses previously given. The consumer survey produces a respondent profile (Table 1), the current sources of health/medical information (Figures 1 and 2), and proposed usage. Currently providers are the single largest source of information and consumers predict 81 percent would use a pre-recorded information system if it were available to them.

Provider Survey

Providers, Physicians, Physician Assistants, Nurses, and Allied Health Scientists received an eight-question survey at sixteen separate AMEDD MTFs throughout the Continental United States. Each MTF received ten surveys; a total of 160 surveys. The return rate of 82.5 percent represents 132 responses. The survey instrument is designed to measure the feeling providers have towards health/medical information and their projected support of a pre-recorded audio system. A breakdown of the numbers of respondents by category is reproduced in Table 3.

TABLE 3
CATEGORY OF PROVIDER RESPONDENTS

			
		% of	
Category	#	Responses	Cumulative
Physicians	59	44.7 %	44.7 %
Phys Asst	10	7.58%	52.27%
Nurses	32	24.24%	76.52%
Allied Health Sci	31	23.48%	100.00%

The first question asks providers their opinion regarding the importance of access to information 71.21 percent find access to be extremely important, 25 percent moderately important and 3.79 percent of little importance.

Undesirable and extremely unimportant are not response selections. Comparing categories of providers to the responses in question #1 through the use of ANOVA, the null hypothesis, there are no differences between providers' responses, is rejected. The F-ration is 3.32 with a probability value of .0214. The analysis shows physician assistants to value the importance of health/medical information for consumers a little less than either physicians, nurses and allied health scientists. The closer a group's mean value is to one (1), the more they regard the importance of access to health/medical information. Nurse responses have a mean value of 1.125, the closest to one of all four groups. Physicians, Physician Assistants, and Allied Health Scientists have mean scores of 1.37, 1.7, and 1.32 respectively.

Question #2 asks providers if information on health and disease is equally important for all or some patients. 'All' was chosen 75 percent of the time and 'some' 25 percent of the time. This further shows a strong trend for the support of health/medical information availability.

The survey utilized questions 3 and 4 to determine locations and types of pre-recorded systems in and outside the AMEDD. All ten providers at Blanchfield Army Hospital, Fort Campbell, KY, responded 'yes' to knowledge of a system in the AMEDD specifically at their facility. Surprisingly, none of the ten agree on who has operational control or where the system is located. Only one response is correct by saying it is located with communications; however, most are aware of brochures (Appendix E), which contain telephone access number. Question four, awareness of systems outside the AMEDD, is of little to no value. The question is often misinterpreted indicated by the listing of television channels, names of drug companies, books, articles, and other unrelated answers.

An affirmative answer to the referral of patients to a professionally made taped message occurs 107 times for 81.06 percent of the responses and negative responses number 25 for a share of 18.94 percent. Some responses also include comments indicating they, the provider, would first listen to the tape prior to referral. To determine if a difference exists among groups of providers who

would refer patients the statistical test of chi square provides data to reject the null hypothesis. (There is a difference.) The probability value is .1671. Contingency tables of observed frequencies and expected frequencies are in Table 4.

TABLE 4
PROVIDER CONTINGENCY TABLES (CHI SQUARE RESULTS)

Observed								
	Physician	PA	Nurse	AHS				
Yes	43	9	. 27	28				
No	16	1	5	3				
	3	Expecte	<u>d</u>					
	Physician	PA	Nurse	AHS				
Yes	47.85	8.11	25.94	25.13				
No	11.17	1.89	6.06	5.83				

The next two questions (6 and 7) referencing trust in a pre-recorded tape and future time savings are tested among the four groups of providers using ANOVA. In both cases, there is no significant difference among the groups. Scoring ranges from 1 to 5. A score of 2 is used assigned to trusting very much and 3 to trusting tapes a little. The mean score for trusts is 2.4 indicating the groups fell between trusting the tapes very much and trusting

the tapes a little. Again, unsolicited comments make reference to listening to the tapes prior to referring patients.

Time that would be freed up averages 2.96 hours per week with a range of 0 to 10 hours. This may be skewed to the right for the question did not allow for a negative response. Eight responses said a pre-recorded system may generate more patient questions which, in turn, would take more time. These eight responses are coded as the savings of 0 hours; unfortunately, potential time consumption due to additional consumer questioning is never indicated.

Therefore, referral to a system would be performed by more than 80 percent of the providers, physician assistants value medical/health information for patients a little less than the other providers and providers believe such a system would save 2.96 hours per week.

Cost

Although cost is not used as a criteria in this paper for accepting or rejecting the system concept cost is ultimately a factor for a decision by a medical treatment facility. Two alternatives exist in the acquisition of an information system. The first is to purchase a system off the shelf. The second is to produce pre-recorded tapes in-house.

The most widespread system that can be bought off the shelf is Tel-Med. This system has proven successful throughout the country and is in place in more than 200 cities. Tel-Med is also regarded as being highly reliable; it is backed by a nonprofit corporation that has been producing a quality product for 14 years. It satisfies the needs of its health care sponsors and as of this date, has not been subject to litigation. Teletronix information systems of Colton, California will provide all the necessary Tel-Med equipment and training to become functional. They will also assists the facility in determining equipment requirements. An initial set up cost, plus one year support fee, is as follows:

7. Equipment Cost

- A. Teletronix Model 1510 (5-unit playback) \$12,455.00
- B. Phone installation (5 lines) 500.00
- C. Accessory equipment (cartridge holders) 450.00

\$13,405.00

II. Tape Cost

300 Tapes @ \$25.00 each \$ 7,500.00

\$ 7,500.00

III. Program Support Fee (Appendix G)

\$30.00 per month \$ 360.00

\$ 360.00

TOTAL \$21,265.00

The Teletronix Model 1510 is capable of playing five separate tapes at one time to as many consumers. The equipment features a 14-month warranty. The total tape cost is dependent upon two variables: quantity and standardization. Quantity speaks for itself; total cost is reduced or increased depending upon the size of the library. A tape taken directly from the master library (standard tapes) costs \$25; re-narrated tapes are \$40 each; and in between is a modified master library tape; one selected by the licensee from the master library that requires the addition of any information, which costs \$35 a piece. Tapes which originate from the licensee or from a script from another licensee are \$40. The total cost estimate is based on a standard tape and a typical library of 300 tapes.

Cost of running an answering service is not included in the estimate. Some facilities such as Blanchfield Army Hospital and Sheppard AFB Hospital incorporate the mission into an existing department without providing additional staffing. In addition, costs may occur for advertising and/or brochures listing available messages. This printing and reproduction may be accomplished by the individual facility or through a commercial firm. Sierra Medical Center uses a local advertising firm who produces brochures at a cost of \$150 per 2500 brochures.

In-house costs are the same for the capital equipment, assuming it is purchased from the same vendor, and for the telephone lines. Tapes and program support fees are the only variables in this comparison. Tapes can be produced in the Television Branch, Health Services Media Division, Academy of Health Sciences, Fort Sam Houston, Texas. The actual taping cost of a five and one-half minute tape, the length of an average Tel-Med tape, is \$16. This cost includes \$7 for the cartridge and \$9 for 30 minutes' salary. Two individuals, GS-7, are required: one to read the script and the other to operate the recording equipment. Additional tapes can be reproduced at the rate of six per hour; thereby reducing the \$16 cost to approximately \$10 each.

In addition to \$16 for an original, the cost of script production must be included. Teletronix, Inc. estimates each tape requires a professional writer 20 hours to write. The 20 hours include research, original script documentation, and eventual rewrites as necessary. Plus a panel of six experts, typically five physicians and one lawyer, review the script prior to its taping. Total cost is estimated to be \$750 per original tape for

Tel-Med.⁷ The military may be able to accomplish the script writing at no extra cost by tasking organizations and personnel based upon existing assets; or costs my be higher if resources are added to develop scripts.

Therefore, the exact cost of each tape produced in-house cannot be accurately determined until the parameters of such a mission are defined. Cost per tape must be based upon resources, mission allocation, and quantity of each tape produced. To produce a tape for a few facilities would be far greater than the average cost for many facilities. However, for comparison, one can assume in-house script production cost to be the same, \$750. If each tape costs approximately \$10 versus \$25 from Tel-med, a \$15 differential exists. A break-even point would occur after the 50th tape is produced (750 divided by 15). Any production of less than 50 tapes would cost more than commercial purchasing.

FOOTNOTES

¹Interview with Karen Pugsley, Captain, ANC, Community Health Nurse, Blanchfield Army Community Hospital, Fort Campbell, Kentucky, 27 March 1984.

²Ibid.

³Interview with Mr. Mark Provost, Manager of Operations, Teletronix, Colton, California, 27 December 1983.

⁴Fee Schedule, Tel-Med, Inc., Colton, California, 1 February 1984.

⁵Interview with mrs. Lynn Freeman, Director of Volunteers, Sierra Medical Center, El Foso, Texas, 20 December 1983.

⁶Interview with Mr. Coleman Barber, Health Science Media Division,
Academy of Health Sciences, Fort Sam Houston, Texas, 13 January and 27 March
1984.

⁷Ibid. Mr. Mark Provost.

III. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The use of a pre-recorded audio health/medical information system in civilian communities has proven to be frequently and effectively utilized. The systems have increased accessibility to health/medical information, assisted in combatting rising costs by reducing unnecessary visits and aiding consumers in recognizing early signs of illness, and helped access to healthy services by helping patients find appropriate community resources. Furthermore, these systems have increased public relations between consumers and providers at a relatively inexpensive cost. Accurate and comprehensible messages have assisted in changing lifestyle decisions in the general population by promotion preventive medicine, the key ingredient to better health.

The AMEDD consumer in CONUS has shown through the survey instrument they mirror the needs and wants of civilian health care consumers. Consumers in the AMEDD health care system have the same degree of need for health/medical information and turn to the same sources as their civilian counterparts to satisfy that need. Projected AMEDD consumer usage of an information system is in excess of the actual usage of civilian systems and nearly 6 percentage points higher than this project's established criteria.

Providers of care in the AMEDD have uniformly agreed health/medical information is a necessary adjunct to patient care. All four primary groups have indicated, through 81 percent affirmative responses, they would refer patients to a professional made information tape. In addition, most feel such a system would free up two to three hours per week to spend providing better care.

Given the responses of the AMEDD consumers and providers, plus the pre-established criteria, it is concluded that a pre-recorded audio health/ medical information system is applicable to the AMEDD in CONUS. Cost determinations must be evaluated on a case-by-case basis at the particular medical treatment facility.

Recommendations

It is recommended that Health Services Command determine which medical treatment facilities in CONUS do and do not have access to a health/medical information system. Those facilities with an available system should be directed to coordinate with the appropriate local health agency to ensure the AMEDD consumers are aware of the service. Dissemination of brochures/advertising can be accomplished through the local Community Health and Education Program (CHEP) committee and the Community Health Nurse. Other avenues of promotion exist and should be pursued such as military newspapers, daily bulletins, command briefings, and community awareness councils.

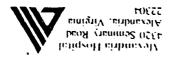
Medical treatment facilities which are remote or do not have access to an existing health/medical information system should be considered as a potential site for a system. The determination to purchase a commercial system or to produce tapes at the Academy of Health Sciences must be made by the HSC Commander. Cost determinations, system reliability, and proven efficacy should sway the decision towards a commercial product.



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4 ft's a great thing for the community."

1. Aexambria

4. I think Health-Line is a great idea?

S. L. Springfield

4. Pre listened to the tapes and found them very good?? L.S. Falk Church "Health-Line is a wonderful service, and I do appreciate it. I'm an elderly gentleman—and Health-Line is a source of information I use often?"

c. I think there is a good range of subjects covered, and they give an amazing amount of information in a short time.

It's a very helpful service??

R. R. Washington. DC

"Tre always found Health-Line
so be very informative and
helpful—I turn to Health-Line
before anything else."
B. H. Annandale

Health-Line provides the important information you need for yourself and your family.

- It helps keep you healthy with messages on diet, exercise and stress management.
 - In helps alleviate unnecessary worry about minw symptoms.
- It deals with children's illnesses and behavior problems.
- It offers advice on common complaints like cods, hayfever and warts.
- It helps you recognize early signs of illness, and aids in adjusting to serious illness or the possibility of an operation.

Health-Line is as easy to use as your telephone.

Simply review the list of topics to make your selection. Then call \$70+8282, tell the Health-Line Librarian the number of your selection. and you will be connected to that message at once.

If you're not sure which number to request, the Health-Line Librarian will personally assist you in choosing the right topic.

Health-Line never sleeps. Health-Line is on call all day, every day.

Unlike other phone services, if you call during our regular hours—between 9:00 a.m. and 8:00 p.m.—a Realth-Line Librarian will be at hand to talk with you personally.

Since you and your family may need health care information ufter hours, we've developed an automated system that can serve you after R;W p.m. and before 9;W a.m.

How to call after hours: You need a push-button telephone with

True-Tone (catares.

- Look through our list of topics and find the message you want to hear.
 Note the three digit number of that selection.
- Note the three digit number of that selection.
 Call 370-8282, and follow the instructions.
 The Health-Line Library is updated constantly.
 You can call any evening for a current listing of after-hour messages available.

Health-Line is an invaluable information system. It is not:

- An emergency service If you have un emergency, the Alexandria Haspital Emergency Department is open 24 hours a day to serve you.
- A diagnostic service
- A replacement for your doctor

If you need a doctor, we can help. Health-Line messages do not tell you why you are sick, only your doctor can do that. If you do not have a personal doctor, call the Alexandria Hospital Physician Referral Service at 379-3424.

Alexandria Hospital can put you on course for health.

Alexandria Hospital offers community health celucation programs, activities and lectures on health topics and preventive medicine.

We're a private, non-profit community boxpital. Our central location, easy success to major highways, as well as the quality and extent of our services make Alexandria Hospital a facility which attracts residents from the entire mercpolitan area. We are owned and operated by a non-stock corporation made up of residents in the community we serve. We are not affiliated with local, state or federal

Since Health-Line is a free community service, characters to offset the costs of operation are appreciated.

If it's a question of health, the answer is personal, confidential, and free...on Health-Line.

Whatever your health care question — whether it's on first aid, matural childhight, diet, drags, depression, infectious disease—all you have to do is pick up the phone and call Health-line. You'll get the information you need inmediately, in clear, easy-to-understand terms. It's an Alexandria Hospital service that allows you to learn in the privacy of your own home to hearn in the privacy of your own home whenever you wish. You don't have to give your name or any explanation, and best of all, it's absolutely free.

It's the most comprehensive program of its kind in Northern Virginia.

We've put the most extensive collection of health topics right at your fingertips. Our p Health-Line Librarian can connect you with any one of nearly 300 messages. Each four to six-minute message has been prepared by experts in the field, then carefully reviewed by members of the medical staff at Alexandria Hospital. But our health service doesn't stop when the health message does, a unique feiture is that should you need further information, we'll give you a number to call for additional resources or a physician referral.

Health-Line 370-8282

COMMON HEALTH CONCERNS

115 Having headaches?
125 The common cold
263 The flu.
118 Sinusitis
489 Lice are not nice?
160 I bink I have athlete's foot
223 Calluses and corns
109 Warts
175 Commonwealth

Warts
Constitution a problem?
Let's talk about hemorrhoids
Living with haylever
Insect stings
Dictary treatment of an ulcer
Have you a chronic cough?

Varieuse veins

Genital herpes and cold sore virus Herpes management What causes asthma?

405 233 321 311 The treatment of asthma

Peptic ulcers Shingles Strept throat 418

Wordering about ear-piercing? Hearing loss from otosclerosis Plantar warts

ranna warra Anema What kidneys do for you Secret cure for cancer The colposcopic examination Facing an operation Biopsy—what and why? Hintal hernius

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457 Inguinal hernia in adults 455 Thyroid studies

Emergency Care and Safety

250. First aid for burns About head injuries

First at an auto accident Understanding sheek Carbon monoxide – the silem killer Rabies and animal bites

Medic alert could save your life
 Medic alert could save your life
 Common injuries in children
 Tap water scald injuries
 Do I have appendicitis?

Contraception

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157 The condom as a contraceptive
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154 IUD facts.

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Drugs and Alcohol

How to use prescription products Over-the-counter medications

Re-using medicines Medicine – more is not better

Aspirin 174

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Drugs during pregnancy
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The pros and cons of Lactrile
What is a drug?
Drug freak-suts and bad trips
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Depressant drugs and combinations Speed: amphetamines and substitutes

LSD. MDA, peyote and psikecybin

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24s LSD, MDA, pervice and psicocyon 243 Quadiodes or sopors 349 PCP (Phenyleyclidine) 164 Alcohol is a drug 443 Overnose of alcohol horra your health 352 Remposating drinking 273 Problem drinking 345 Sparting problem drinking 119 Living with an alcoholic?

The hyperactive child

Your child and sleep problems Earache in children My child has a faver 360 172

Vomiting in children Diarrhea in children

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247 Mere kisydrome from
248 Mint to the table ac ded
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240 Where bubbles come from
241 Core bubbles come from
241 Core bubbles come from
242 Where do bubbles come from
243 Mere bubbles come from
244 Visu we got chickcomp the
245 Are you afrand I fin afraid
256 Chris Cursous and home safety

253 Chris Curious gets poison by 249 Who needs aene?

Mout Your Eves

Something in your eye? What about cataracts? Do you know if you have glaucoma? Saye in your eyelid

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442 Eve donation
443 Corneal transplantation
255 Do you have double vision?
440 Lazy eye or amblyopia

Special Subjects

315 Depression 211 Thinking of suicide?

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Living with an alcoholic?

Facing loneliness when you're older

Battered women

Child sexual abuse

Alzheimer's and senility

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141 Physical fitness through exercise *
204 No time for exercise?
150 Exercise

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Have a weight problem? The magic formula for weight loss Health foods and fad diets

Are vitamin supplements necessary?

Obesity

Obesity
Anwesia nervosa
Special dietetic foods
The boulism store cause illness?
Tips on keeping food safe
Are won a vegetarian?
Planning economic nutritious meals
Mean hamping and marketing its 224 357 358 359

ASS Meal planning and marketing tips 359 Ear well for less 270 Dietary treatment of an ulcer 307 Nutrition during pregnancy

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Why immunize for tetanus

Are wou protected against polic? Immunizations for travel Immunize—end childhood diseases What shots should my child have? ,766 166

Parents
Keeping children healthy in winter
Keeping children healthy in spring
Keeping children healthy in spring
Keeping children healthy in fall
Hello grandparents
Naurishing snacks for little people
Immunitze – end childhood diseases
What shots should my child have?
Will your child be poisoned today?
Keep your child from choking
Puts in the home
Sibling relationships

12. 12. 12.

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Sibling relationships
Sibling relationship questions
Responsibilities: Child to Parent
Responsibilities: Parent to Child
Play—why and with what
The infant ICU (Intensive Care Unit)

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The infant it Offinensive Care Units Preventing developmental disabilities Common injuries in children Tap water scald injuries The hyperactive child Your child and sleep problems

DISEASES

Da I have appendicuts
Diabetes? What does it mean?
Epilepsy—control and treatment
Living and working with an epileptic person
What is cerebral pulsy?

What is cereival passy?
Parkins mism
What is multiple selectiss?
Emphysema
Lung disease enused by dust
Infectious monometersis

Viral hepatitis Pneumonia Legionnaires' disease Gallstones

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Gulfsteiner
Infection und kidney discuse
Kidney stones
What alvate esturacts?
Do you know if you have glaucestus?
Alzheimer's und sentifity
A.I.D.S.—When is it?
A.I.D.S.—Symptoms and disquosis

Heart and Bland Vessels

420 Understanding a heart attack 149 Obesity 150 Exercise 311 Atherwidensis 312 High bland pressure Athermolecum
High bland pressure

What is hardening of the arteries

Prevent bardening of your arteries Prevention of a heart attack

Presention of a neart action Feat care if you have diabetes or pear circulation Heart pacemakers What are the dangers of hypertension?

Arthritis

What you should know about arthritis Living a full life with arthritis Osteoarthritis: a conversation

Rheumatoid arthritis Aspirin and ambridge

Aspiriti and arthritis
Arthritis and children
What do you know about gout?
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with is cancer?
Biopsy—what and why?
Protect yourself against cancer
Cancer is being cured
Cancer of the larynx

Cancer of the lung Is smoking really dangerous? Cancer of the breast

Cancer of the breast Cancer of the skin Cancer of the colon and rectum Testi, day cancer Cancer of the uterus What is Hodgkin's disease? Treatment of Hodgkin's disease Selection of cancer treatment The provand cons of Cancer

Secret cure for cancer
The colposcopic examination What is leukenna?

Venereal Disease

Sexually transmitted disease

Venereal disease Syphilis Gonorrhea and syphilis

Generalies and women

Genital herpes and cold sore virus Herpes management A.I.D.S. – What is it?

452 A.I.D.S. – What is it? 453 A.I.D.S. – Symptons and diagnosis

OF INTEREST TO WOMEN

Breast self-examination Rehabilitation after mastectomy Manningraphy and acregraphy
Mothers, daughters, and D.E.S.
Your hysterectiony
Having a D & C
Battered women
Cancer of the breast

Anorevia nervosa

Pregnass and Childbirth Before you begin your pregnancy

Can't become pregnant? What is the Rh factor? Rh negative management

Amniocentesis

Petal monitoring
Drugs during pregnancy
Drugs, pregnancy, and the unborn
Nutrition during pregnancy

去事会認 The pregnancy at risk Danger signals in pregnancy Breast feeding—Part I How to breast feed—Part II

Contraception and Unwanted Pregnancy

Could I be pregnant?

Contraception - it's your choice

The pill in perspective
The pill in questions and answers
The pill innore questions

The diaphragm as a contraceptive The condom as a contraceptive IUD facts

Laparoscopy and tubal ligation Thinking about vascetomy? An unwanted pregnancy? Facts about abortion

Natural birth control

Menstruutlen

MIT Man manual

Living with your mensitual cycle Pain during mensituation Menopause problems? Menopause—questions and answers

Intection and Disease

Vaginal discharge
Vaginal infections
Vaginal infections — yeast
Vaginal infections — trich sussus
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Generation and system 140 127 127 137 147 148 148

be available.

Health-Line is always available. 24 hours a day. 7 days a week. 52 weeks a year.

9:30um-8:30pm: Personalized Service. A Health-Line Libearian will be there to help you 8:30pm-9:30um and Holidays:/lutimated Service. Our fully computerized service will

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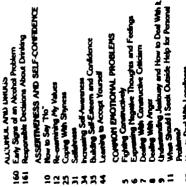
is on call 24 hours a day.

Health-Line Library

Phone 370-8282 for nearly 300 listings



REPL	Y FORM————————————————————————————————————
Mexandra Hespital is roun community resource. Use if	Name
Pleuse year off at perforation and mail to:	Address
Public Relations Dept., Alexandria Hospital 1320 Seminary Road, Alexandria, VA 22364	CityStateZip
Please send future editions of the Health-Line	Phone: Day Evening
brochure.	If you have triends or relatives who is add be interested in
I'd like to become a Health-Line volunteer.	 hearing about Health Line and Alexa (may) Usepite (prose- pit their names below)
Enclosed is a donation to Health-Line.	Name
I think you should add Health-Line messages on the following topics:	Address
	CityStateZip
-	Name
	Address
Education programs.	City State Zip



When asking for any of the lapes on this page, please refer to them as "Consequent lapes. to Dad With Londines to Dard With Department on Liferaly DEATH AND DITHG g2588

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Patients in Male Scaue & Sea Role — Changes et

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wing Suicidal Potential in Others ĝ 22

5

What is Tel-Med/Counseline?

fel-Med/Counseline, sponsored by the Sierra Medical Center Audilary, is a free health information istening library that operates 24 hours a day, seven days a week One phone call to Tel-Med/Counseline can provide information about a common illness or injury, or day-to-day living problem. It is not, however, an emergency number — it is simply a health information service.

United States, all originating from Tel-Med, Inc., the national group based in San Bernadino County in California, Tel-Med, Inc. has over 300 health tapes to There are more than 300 Tel-Med systems in the choose from The Counseline Program was developed by Counseling-Psychological Services Center of the Hogg Foundation. There are approximately 40 Counseline systems in the United States, with 70 tapes to choose from

able in Spanish, through funding provided by the Gannet Foundation. The Spanish tape listing is The El Paso Tel-Med/Counseline Library, currently numbering over 250 tapes, is supported by the Sierra Medical Center Audiliary and the community. The most commonly requested tapes are also availavailable upon request.

How Does Tel-Med/Counseline Work?

number of the tape you wish to hear. A complete list of available tapes is listed inside this brochure. Simply call 778-6688 and give the operator the

caring for your newborn baby, just dial 778-6688 call back and the operator will be happy to play it For example: If you would like to know more about and ask for Tape #261; Care of the Newborn. The operator will then play the tape for you. If you wish to hear the same tape over again, or any other tape, just o you

sages over the phone in the privacy of your home. Each tape is three to five minutes long, and is You can listen to Tel-Med/Counseline taped mespresented in easy-to-understand language Tel-Med/Counseline is approved by the El Paso Medical Society. A project of Listen America, Tel-Med/Counseline is supported by the community.

Tel-Med/Counseline? Who Promotes

ine and its full library of tapes are partici-pating physicians and local health care agencies, 7-11 Stores throughout El aso, and the Sierra Medical Center Helping to promote Tel-Med/Counse

Better Health

Phone Cal

Important

gency number. If you have a medical emergency, please dial 911. Tel-Med/Counseline is not an emerif you need more information about a particular subject, or need help for other than emergency situations, you can call the El Paso information and Referral Helpline at 779-1800.

Sponsored by

8*LL*

24 Hours

A Day

Sierra Medical Auxiliary Center (916)

APPENDIX B

MAY I PLEASE HEARTAPE NUMBER "YES, 164.

COUNSELINE MAY I HELP "TEL-MED/ XOU?" a City

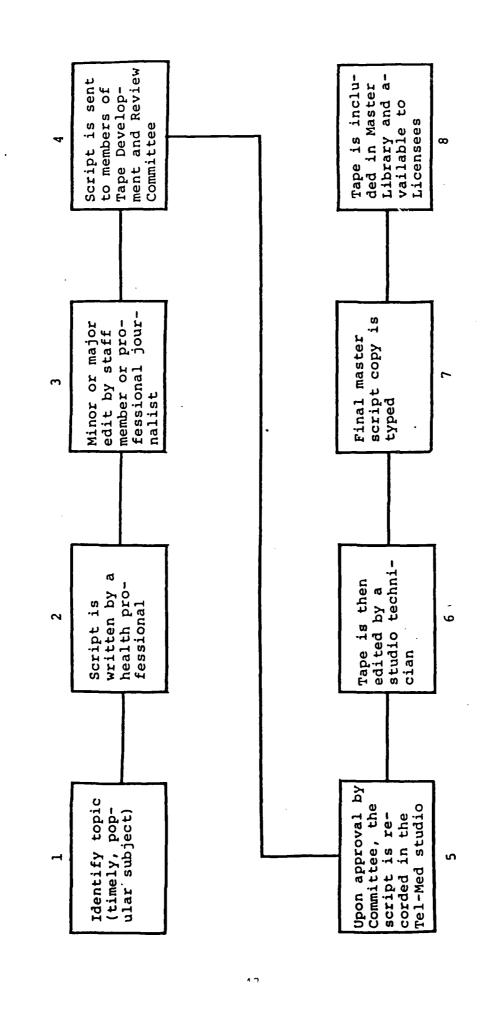
TEL-MED/GOUNSELINE (915) 778-6688 El Paso's only 24-hour health information service.

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APPENDIX D Survey Questions To Consumers

Please answer all the following questions to the best of your knowledge. Your answers will be kept confidential. There is no need to sign or in anyway disclose your identity on this survey.

	. Within the past year, have you had a sease? Yes	need for		
	. Within the past year, have you had differmation? Yes	lifficulty		
rani bei	Where have you sought medical informank on a scale of one to eight with one ing the most seldom. If you have not bu have used.	being the	e most frequent and eight	e
	Provider (Physician, Physici Scientist) Public Library Tel-Med Articles (Journals, Magazine Television Federal and State Agencies (Treatment Facility) Friends/Relatives Other	s, Books,	Newspapers)	
4. Were	Would you use an audio (taped messagre available by telephone? Yes	e) medical	l information system if it No	
5.	Would you trust the medical informat Yes	ion provid	ded by a taped message? No	
5.	Would you follow the advice given on Yes	a taped m	message? No	
7. vitl	Would a taped message on medical info th your, or your family's, medical pro	ormation m blem? Y	make you feel more at ease Yes No	
3.	Would you use the service:			
	For your entire family. Only for yourself. Only for other members of your Not at all.	family.		

Survey Questions To Consumers (Continued)

9.	I am a Male remaie.
10.	My race is
11.	My education level is years.
12.	My age is
13.	My present status is:
	Active Duty Dependent of Active Duty Retired Active Duty Retired Dependent

APPENDIX E

Survey Questions for Providers

Please answer all the following questions to the best of your knowledge. Your answers will be kept confidential. There is no need to sign or in anyway disclose your identity on this survey.

	How important a component or patient care is patient access to information health and disease?
G.	Extremely Important
	Moderately Important
	Moderately Important Of Little Importance Undesirable
	Extremely Unimportant
	No you believe information on health and disease is equally important for or just some patients?
	All
	Some
	Are you aware of a pre-recorded audio medical information system in the DD?
CI.II.	Yes Location:
	No
	Are you aware of any pre-recorded audio medical information system outside AMEDO?
	Yes Type or Title: (Tel-Med/Health-Line)
	Would you refer your patients to a professionally made taped message cerning their health problem? Yes No
	How much would you trust a professionally produced pre-recorded message on patient's medical problem?
	Without Question.
	Very Much
	A Little
	Very Little Not at All
	Estimate how much of your time would be freed up if your patients had ess to audio health information systems hours
8.	I am a:
	Physician (Specialty)
	Physician Assistant (Specialty)
	Nurse (Specialty)
	Allied Health Scientist (Type)

TEL-MED



U.S. ARMY COMMUNITY HOSPITAL

FOREMOR

TO THE TEL-HED HEALTH CARE INFORMATION SYSTEM

TEL-VED is a telephonic health care information system that is available to you through the COL FLORDACE A. BLANDFIELD ARMY COMMUNITY HOSPITAL at Fort Campbell, Kentucky. The TEL-VED Library is designed to give you information on how to:

Remain Healthy

Recognize Early Signs of Illness

Adjust to an Illness or Surgery

Prevent Same Health Problems.

It is NOT to be used:

In an Dimergency

To find Out What Your Illness Is

To Replace Your Doctor

To use the system call 798-7305 and request the name or number of the tape you wish to hear. The TEL-MED System is open for calls 24 hours a day. A complete listing of the tapes, by category, are on the following pages.

TEL-WED is not designed to tell you why you are sick - only a doctor can tell you that. If you need a medical appointment, call the Central Appointment Desk at 431-3404, or if you are in the hospital area call extension 7201, For emergencies call the Emergency Room at 798-3600.

For emergency ambulance, call 798-8100.
REMEMBER - THE TEL-MED HEALTH CARE DEFORMATION SYSTEM IS HERE TO HELLY YOU REMAIN HEALTHY ALD TO PREVENT ILLARESS.

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1111.		Alcoholism: The Scope of the Problem	How AA Can Help the Problem Orinker	Is Drinking a Problem?	So You Love an Alcoholic	To Drink or Not to Drink	BINTH CONTROL	Birth Control	Diaphragm, Fcam and Condom	Infertility	Intrauterine Devices	The Pill	The Rhythm Method	Vasectomy			Breast Cancer	Cancer of the Bone	Cancer of the Brain	Cancer of the Colon	Cancer, The Curable Disease	Cancer of the Larynx	Cancer of the Mouth	

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315	Dental X-Rays - Really Pecessary	121	Arthritis Rheumatism
304	Diet Tips for Dental Health	1140	Blood In The Urine
302	Effective Toothbrushing	129	Bursitis
101	flossing Your Teeth	336	Cystic Fibrosis
310	How Important are Baby Teeth	662	Diverticulosis - Diverticulitis
305	Malocclusion - Crooked Teeth	280	Dust Diseases
307	Seven (7) Warning Signs of Gum Disease	125	Epilepsy
306	What About Wisdom Teeth?	126	Gout
111	What Not To Do for a Toothache	162	Hepatitis
cuc	What You Don't Know About Dentures Can Hurt You	577	Histoplasmosis
314	We Know What Causes Bad Breat?, Do You?	\$65	Hypoglycemia
321	Which Toothpaste?	696	Infectious Mononucleosis
308	Why and When Some Teeth Have To Be Replaced	38	Influenza
1310		238	Neningitis
909	A Guide to Good Eating	825	Multiple Schlerosis
609	Answers to Questions About Diabetic Diets	128	Pheumatoid Arthritis
603	Breakfast, Why is It Important?	124	Shingles
009	Cholesterol in Your Diet	999	Sickle Cell Anemia
\$09	Food Stamps and Good Nutrition	11	You May Have Diabetes and Not Know It
602	How Important are Trace Minerals in Your Diet	DI SEASES THAT	DISEASES THAT AFTECT BREATHING
109	Low Salt Diet	576	Bronchial Asthma
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•	What a Case of Preumonia Means	
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139	Help Yourse: 3c: Well	
141	How New Medinines are Tested	
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22	Foot Care for Diabetics & Others with Poor Circulation	
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472	Cataracts	
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582	Shortness of Greath		There were the beginner of the best the the the the the the the the the th
^	What a Case of Preumonia Means	1101	Exercising: Warming Up Slowly
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7500	200 000	49	Flies: Dirty and Dangerous
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140	Now Safe are Crucs	1180	Homosexuality
134	150		
111	Marijuana	166	How to Take Temperature, Pulse 6 Respiration
138	Narcotics	1050	Male Sexual Response
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77	Foot Care for Diabetics & Others with Poor Circulation	122	Sleep is Kind
4.7	Leg Cramps and Aches	152	Social Security and SSI
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36	Stroke and Apoplexy	\$	No-No: What Does it Mean to the Toddler?
MENTAL HYGIENE	IENE	8	Teen Years - Age of Rebellion
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159	Hypnosis	405	The Single Parent Family
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נגנ	Schizophrenia	402	Where Did I Come From, Momma?
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67	Warning Signs of Pregnancy	VENEREAL DISEASE	ASE
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9	Lumps and Bumps of Arms and Legs	*	Poisoning By Mouth
\$26	Marmog raphy	01	Poisons in the Home
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S	Tubal Ligation	110	When You Find Someone Unconscious
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APPENDIX G

TEL-MED, INC. PROGRAM SUPPORT FEE

The following services provided by Tel-Med, Inc. to all licensees are sustained by a monthly program support fee of \$30.00, as documented in the Tel-Med, Inc. Current Fee Schedule.

- I. CONTINUAL REVIEW OF TAPE CONTENT Each tape in the Tel-Med, Inc. Master Library is under continual review by the physicians of the San Bernardino County Medical Society, selected health care specialists throughout the country, the Tel-Med, Inc. Medical Director and staff. In addition, comments from medical authorities in the United States where scripts are under review for new Tel-Med programs, are incorporated with the latest available health and medical information, to ensure the content of each tape is pertinent and accurate. When revisions due to medical update are made necessary, all licensees are notified immediately, and the updated tapes are provided at cost.
- II. RESEARCH AND DEVELOPMENT OF NEW TAPES We continually explore new areas and respond to consistent inquiries for new topics to be added to the current Tel-Med, Inc. Master Library of over 300 tapes. Our many sources, including health care experts from operating Tel-Med programs, have provided material on a multitude of topics not presently available in the Tel-Med, Inc. Master Library.
- III. NATIONAL CLEARINGHOUSE FOR HEALTH CARE INFORMATION As an extension of our research and development program, we can provide all Tel-Med, Inc. licensees with any material we have compiled for development as an addition to their library. Through this practice of collecting and disseminating data, Tel-Med, Inc. acts as a national clearinghouse for health care information.
- IV. TEL-MED, INC. NEWSLETTER The Tel-Med, Inc. Newsletter is published monthly and circulated among Tel-Med licensees to help us all benefit from each others' experience. We receive input from each licensee and publish information that can benefit everyone. In addition, the Newsletter is our medium for notifying licensees of available new and revised tapes, and all other services provided by Tel-Med, Inc.

APPENDIX H

SCRIPT DEVELOPMENT GUIDELINES

- 1. Before writing your own script, check with the Tel-Med, Inc. office. It is possible that another Tel-Med licensee has already developed a script on the subject. If so, it is available for your use. Please keep in mind, however, this source material is not part of the Master Library, and Tel-Med, Inc. does not assume responsibility for its accuracy.
- 2. Scripts should be no longer than five minutes in length (about two and a half double-spaced, typed pages).
- 3. Write your script for the eighth grade listening level. Anything more complicated will not be as effective or reach as many people.
- 4. Make certain all script changes are legible. For minor changes, a simple "line out" of the material with a clearly printed word above that line is suitable. For major revisions, please retype the script; double-spaced.
- 5. Clearly note difficult pronunciations. More specifically, give phonetic guides for names, organizations, streets and medications to assist the narrator.
- 6. Keep your trailer message short and to the point. We suggest that you do not refer to names or telephone numbers since they can and do change. Such changes will outdate your tape.
- 7. Send the final script to us, and we will assign it a 5000 Series number prior to recording. This is done to circumvent any conflicts in the Master Library numbering system.
- 8. The general rule of thumb is: <u>submit your script exactly as you want it recorded</u>.

BIBLIOGRAPHY

<u>Articles</u>

- Bartlett, Marjorie H. and Meyer, Thomas C. Patients Receive Current, Concise Health Information by Telephone. Hospitals 50 (February 16, 1976): 79-80.
- Caffarella, Rosemary S., PhD. "Hospital-Based Education Programs for Patients: Views of Health Care Professionals in Maine." Public Health Reports (96)5 (December 1981): 560-567.
- Deeney, Kathleen E. and Moeller, Kathleen A. "Documenting the Need for Consumer Health Information: Results of a Community Survey." <u>Bulletin of the Medical Library Association</u> (70)2 (April 1982): 236-239.
- Diseker, Robert A. Dr. PH., Michielutte, Robert, PhD., Morrison, Virginia, MED.
 "Use and Reported Effectiveness of Tel-Med: A Telephone Health
 Information System." American Journal of Public Health 70(3) (March
 1980): 229-234.
- Eakin, Dottie. "Consumer Health Information." <u>Bulletin of the Medical Library Association</u> (68)2 (April 1980): 220-229.
- Elsner, Robert H. "Tel-Med." The Bulletin, August 3, 1978, p3.
- Goodwin, Norma T., and Goldstein, Marjorie F. "A Practical Approach to Assessing Patient Learning Needs." Journal of the National Medical Association (73)6 (1981): 533-537.
- Hansen, Marian and Lavandero, Ramon. "A Multidisciplinary Education Program for Patients Undergoing Cardiovascular Surgery." Quality Review Bulletin May 1981: 20.
- Henry, Sarah. "Doctors on the Air: The Successful Trial of Dial-a-Doctor." CMA Journal 121 (September 8, 1979): 653-4.
- <u>Hospitals</u> "Hospital's Library Serves as Focal Point for Community's Quest for Facts on Health." October 16, 1982: 36-36.
- Hospitals "13 Virginia Start Support Group to Keep Abreast of Patient Education Trends." April 16, 1982: 18.
- Klimecki, Camille C. "A Multiphasic Patient Education Program." Quality Review Bulletin May 1981: 21-28.

- Lyons, Chalmers. "Interactive Computerized Patient Education." <u>Heart and</u> Lung (11)4 (July August 1982): 340-341.
- Mazzuca, Steven A. "Does Patient Education in Chronic Disease Have Therapeutic Value?" Journal of Chronic Disease 35 (1982): 521-529.
- Rayburn, William M.D., et. al., "Prenatal Counseling: A Statewide Telephone Service." Obstetrics & Gynecology 60(2) (August 1982): 243-246.
- Redman, Barbara K. "Patient Education in Hospitals: Developmental Issues."

 The Journal of Nursing Administration September 1981: 28-30.
- Roth, Britain G. "Health Information for Patients: The Hospital Library's Role." <u>Bulletin of the Medical Library Association</u> (66)1 (January 1978): 14-17.
- Tel-Med News "Marketing Tel-Med." November, 1983: 3-4.

<u>Books</u>

- Skrainka, Philip M.D. <u>Medical Information In Sickness and Health</u>. New York: Coward-McCann Inc., 1980.
- Tubesing, Donald A., PhD. Wholistic Health. New York: Human Sciences Press, 1979.
- Vickery, Donald M., M.D. <u>Take Care of Yourself</u>. Massachusetts: Addison-Wesley Publishing Company, 1976.

Interviews

- Barber, Coleman. Health Sciences Media Division, Academy of Health Sciences, Fort Sam Houston, Texas. Interview: 13 January 1984; 27 March 1984.
- Bresnan, Maria. Comptroller, William Beaumont Army Medical Center, El Paso, Texas. Interview: 12 January 1984.
- Freeman, Lynn. Director of Volunteers, Sierra Medical Center, El Paso, Texas. Interviews: 20 December 1983; 30 January 1984; and 20 March 1984.
- Hammel, George, CPT. Administrative Resident, Dwight D. Eisenhower Army Medical Center, Fort Gordon, Georgia. Interview: 9 January 1984.

- Harper, Benson W., M.D. "Tel-Med A Success Story." Western Journal of Medicine 131(2) (August 1979): 162-164.
- Hawkins, Michael, CPT. Researcher, Army Residential Treatment Facility, William Beaumont Army Medical Center, El Paso, Texas. Interviews: 17 January 1984; 26 & 27 March 1984.
- Kahn, Jean. Sierra Medical Center, El Paso, Texas. Interview: 20 December 1983.
- Kohler, James C. Administrative Resident, Womack Army Community Hospital, Fort Bragg, North Carolina. Interview: 13 January 1984.
- Magness, Dorris. Chairman of Tel-Med, Sierra Medical Center, El Pso, Texas,. Interviews: 20 December 1983; 30 January 1984; and 20 March 1984.
- Metz, Martha L., Colonel, ANC, Community Health Nurse, William Beaumont Army Medical Center, William Beaumont Army Medical Center, El Paso, Texas. Interview: 9 October 1983.
- Mouritsen, Paul B., CPT. Administrative Resident, Walter Reed Army Medical Center, Washington, D.C. Interview: 11 and 12 January 1984.
- Provost, Mark. Manager of Operations, Teletronix, Colton, California. Interview: 27 December 1983.
- Pugsley, Karen, Captain, ANC. Community Health Nurse, Blanchfield Army Community dHospital, Fort Campbell, Kentucky. Interviews: 27 & 30 March 1984.
- Smith, Collins E., LTC. Assistant Administrator, Sheppard AFB, Texas. Interview: 3 January 1984.
- Smith, Marsha. Medical Librarian, Walter Reed Army Medical Center, Washington, D.C. Interview: 12 January 19894.

Newspapers

- "Good Service." El Paso <u>Harold-Post</u>, 30 April 1979, sec. B, p.2.
- "Tel-Med Offers Phone Medical Advice." The El Paso Times, 15 April 1979, sec. D, p. 1-D.